



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/701,865

11/05/2003

Joseph J. Kubler

14364US03

7803

7590 02/06/2008  
Christopher C. Winslade  
McAndrews, Held & Malloy, Ltd  
34th Floor  
500 W. Madison St.  
Chicago, IL 60661

EXAMINER

MOORE, IAN N

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

02/06/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Office Action Summary</b></p>	<b>Application No.</b> 10/701,865	<b>Applicant(s)</b> KUBLER ET AL.	
	<b>Examiner</b> Ian N. Moore	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-73 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8-24-2007</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 22,25,26,28,29,32-34,36,39,40,41,47,50, and 57-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken (WO 91/08629) in view of Richter (US006104706A).

**Regarding Claims 22, 28, 29, 36 and 47,** Berken discloses a system for processing voice for communication over a network (see FIG. 1A, wireless telecommunication system for voice and data communication; see page 4, line 6-9) comprising:

conversion circuitry (see FIG. 1C, phone interface 209) for converting analog voice signals to digital voice data (see FIG. 1C, phone interface 209 converts sound/voice input from telephone 127 into digital voice packets; see page 6, line 16-20) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1C, phone interface 209 converts received digitized voice packets back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5);

a processing circuit (see FIG. 1C, a combined system of processor 215, switch 213, phone 209) for managing the packetization of digital voice data to provide digital voice data packets (see FIG. 1C, a combined system 215,213,209 controls/manages converting of voice data to digital voice packets; see page 6, line 5-20) and for managing the depacketization of digital voice data (see FIG. 1C, a combined system 215,213,209 controls/manages converting of

received digitized voice packets back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5), the processing circuit packetizing the digital voice data according to a packet protocol (see FIG. 1C, a combined system 215,213,209 converting voice data in accordance with packet protocol/rule for transmission; see page 6, line 16-20); and

a transceiver circuit for wireless transmission and wireless reception (see FIG. 1A, C, Radio interface 211 circuitry/module which perform both transmitter and receiver functionalities) according to a wireless communication protocol of the digital voice data packets (FIG. 1C, see page 6, line 14-20; radio interface 211 of a user module 103 communicates by utilizing packet protocol/practice/procedure/rules), wherein the digital voice data packets comprises information (see FIG. 3, control time slot of frame; and/or FIG. 4, packet header of the voice time slot) used for routing the digital voice data packets (see page 9, line 1-10; see page 10, line 17-30; control time slot of the transmit/receive frame comprises control information for routing/forwarding through PSTN, Ethernet LAN, or Token Ring LAN; and/or a packet header of the voice time slot comprises control information routing/forwarding through PSTN, Ethernet LAN, or Token Ring LAN).

Berken does not explicitly disclose "destination".

However, voice packet comprising destination information for routing is so well known in the art so that it would identify and locate the recipient of the voice data packet. In particular, Richter teaches wherein the digital voice data packets comprise destination information used for routing (see FIG. 6, destination address 76, max destination count 74, active destination count 72, and destination count that used for routing; see col. 6, line 60 to col. 7, line 20) the digital

voice packets through the communication network (see FIG. 5, for routing voice packets over the network between two callers; see col. 5, line 36-66; col. 6, line 44-56).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide destination, as taught by Berken and well established teaching in art in the system of Berken, so that it would provide capability to the caller and callee to hear each other; see Richter col. 7, line 10-19, and it would also identify and locate the recipient of the voice data packet.

**Regarding Claims 25, 33,40,57,58 and 59**, Berken disclose a frequency hopping spread spectrum technique (see page 11, line 20-31; frequency hoping system of spread spectrum coding).

**Regarding Claims 26, 34, and 41**, Berken disclose a direct sequence spread spectrum technique (see page 11, line 20-31; direct sequence spread spectrum coding).

**Regarding Claims 32,39,50**, Berken discloses conversion circuitry for converting analog voice signals to digital voice data (see FIG. 1C, phone interface 209 converts sound/voice input from telephone 127 into digital voice packets for radio transmission; see page 6, line 16-20) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1C, phone interface 209 converts digitized voice packets received from radio interface back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5).

3. Claims 43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Harrison (US 5,796,727).

**Regarding Claim 43**, Berken discloses a system for processing voice for communication over a network (see FIG. 1A, wireless telecommunication system for voice communication; see page 4, line 6-9) comprising:

a processing circuit (see FIG. 1C, a combined system of processor 215, switch 213, phone 209) for managing the packetization of digital voice data to provide digital voice data packets (see FIG. 1C, a combined system 215,213,209 controls/manages converting of voice data to digital voice packets; see page 6, line 6-20) and for managing the depacketization of digital voice data (see FIG. 1C, a combined system 215,213,209 controls/manages converting of received digitized voice packets back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5), the processing circuit packetizing the digital voice data according to a packet protocol (see FIG. 1C, a combined system 215,213,209 converting voice data in accordance with packet protocol/rule for transmission; see page 6, line 16-20); wherein the digital voice data packets comprises information (see FIG. 3, control time slot of frame; and/or FIG. 4, packet header of the voice time slot) used for routing the digital voice data packets (see page 9, line 1-10; see page 10, line 17-30; control time slot of the transmit/receive frame comprises control information for routing/forwarding through PSTN, Ethernet LAN, or Token Ring LAN; and/or a packet header of the voice time slot comprises control information routing/forwarding through PSTN, Ethernet LAN, or Token Ring LAN);

a transceiver circuit for wireless transmission and wireless reception (see FIG. 1A, C, Radio interface 211 circuitry/module which perform both transmitter and receiver functionalities) according to a wireless communication protocol of the digital voice data packets

(FIG. 1C, see page 6, line 14-20; radio interface 211 of a user module 103 communicates by utilizing packet protocol/practice/procedure/rules).

Berken does not explicitly disclose "destination" and "a media access controller for controlling operation".

However, Harrison teaches wherein the digital voice packets (see col. 4, line 45-49; 65 to col. 5, line 7; packets of voice data) comprise destination information used for routing the outgoing digital voice packets (see FIG. 5; MS adding destination address into packet for routing through network (see FIG. 1); see col. 6, line 5-12; see col. 7, line 35 to col. 8, line 15; see col. 12, line 39 to col. 13, line 11); a media access controller (see col. 5, line 25-31; MAC) for controlling the operation of the transceiver to transmit and receive information according to a wireless communication protocol (see col. 12, line 39-61; MAC controls/process transmit and receive information according to IEEE wireless protocol).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "destination information and MAC", as taught by Harrison in the system of Berken, so that it would ensure to establish and route the packets of voice data to destination end user, provide various classes of data communication services as well as voices services, and provide registration and channel/bandwidth allocation; see Harrison col. 3, line 22-26; see col. 4, line 50-55; see col. 7, line 35-55.

**Regarding Claim 46**, Berken discloses conversion circuitry for converting analog voice signals to digital voice data (see FIG. 1C, phone interface 209 converts sound/voice input from telephone 127 into digital voice packets for radio transmission; see page 6, line 16-20) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1C,

phone interface 209 converts digitized voice packets received from radio interface back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5).

4. Claim 27,35,42,51 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Richter, and further in view of Weaver (US005956673A).

**Regarding Claim 51**, Berken discloses a system for processing voice for communication over a network (see FIG. 1A, wireless telecommunication system for voice communication; see page 4, line 6-9) comprising:

a processing circuit (see FIG. 1C, a combined system of processor 215, switch 213, phone 209) for managing the packetization of digital voice data to provide digital voice data packets (see FIG. 1C, a combined system 215,213,209 controls/manages converting of voice data to digital voice packets; see page 6, line 6-20) and for managing the depacketization of digital voice data (see FIG. 1C, a combined system 215,213,209 controls/manages converting of received digitized voice packets back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5), wherein the digital voice data packets comprises destination information (see FIG. 3, control time slot of frame; and/or FIG. 4, packet header of the voice time slot) used for routing the digital voice data packets (see page 9, line 1-10; see page 10, line 17-30; control time slot of the transmit/receive frame comprises routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN; and/or a packet header of the voice time slot comprises routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN), the processing circuit packetizing the digital voice data according to a packet protocol (see FIG.



1C, a combined system 215,213,209 converting voice data in accordance with packet protocol/rule for transmission; see page 6, line 16-20); and

a radio for wireless transmission and reception (see FIG. 1A, C, Radio interface 211 circuitry/module which perform both transmitter and receiver functionalities) of digital voice data packets (FIG. 1C, see page 6, line 14-20; radio interface 211 of a user module 103 communicates by utilizing packet protocol/practice/procedure/rules) and

a processor (see FIG. 1C, processor 215) for controlling the operation of the radio according to a communication protocol (see FIG. 1A, controls/manage a radio transmission according to a radio protocol (i.e. TDMA); see page 10, line 23-33 for voice packet in PSTN or data packet in Ethernet LAN, or Token Ring LAN; see page 6, line 5 to page 8, line 4) that accommodates a plurality of bandwidth (see page 10, line 4 to col. 11, line 15; radio protocol provides different bandwidth for different services/data type).

Berken does not explicitly disclose "destination".

However, voice packet comprising destination information for routing is so well known in the art so that it would identify and locate the recipient of the voice data packet. In particular, Richter teaches wherein the digital voice data packets comprise destination information used for routing (see FIG. 6, destination address 76, max destination count 74, active destination count 72, and destination count that used for routing; see col. 6, line 60 to col. 7, line 20) the digital voice packets through the communication network (see FIG. 5, for routing voice packets over the network between two callers; see col. 5, line 36-66; col. 6, line 44-56).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide destination, as taught by Berken and well established teaching in art in the system of Berken, so that it would provide capability to the caller and callee to hear each other; see Richter col. 7, line 10-19, and it would also identify and locate the recipient of the voice data packet.

Neither Berken nor Richter explicitly discloses "data rates including at least a standard data rate and a higher data rate".

Weaver discloses a processor (see FIG. 1, Encoder 180) for controlling the operation of the radio according to a communication protocol that accommodates a plurality of data rates (see col. 1, line 25-37; see col. 5, line 55-59; see col. 9, line 33-34; plurality of data rates) including at least a standard data rate and a higher data rate (see col. 1, line 25-37; see col. 6, line 13-25; see col. 9, line 33-35; low or less than full (i.e. half or quarter) data rate and full data rate).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide data rates including at least a standard data rate and a higher data rate, as taught by Weaver in the combined system of Berken and Richter, so that it would provide avoid the disadvantage of tandem vocoding; see Weaver col. 1, line 60-67.

**Regarding Claims 27,35,42**, Berken discloses wireless transmission and reception of digital voice data packets/transceiver utilizes a communication protocol (see FIG. 1A, controls/manage a radio transmission according to a radio protocol (i.e. TDMA); see page 10, line 23-33 for voice packet in PSTN or data packet in Ethernet LAN, or Token Ring LAN; see page 6, line 5 to page 8, line 4) that accommodates a plurality of bandwidth (see page 10, line 4 to col. 11, line 15; radio protocol provides different bandwidth for different services/data type).

Neither Berken nor Richter explicitly discloses "data rates including at least a standard data rate and a higher data rate".

However, Weaver discloses a processor (see FIG. 1, Encoder 180) for controlling the operation of the radio according to a communication protocol that accommodates a plurality of data rates (see col. 1, line 25-37; see col. 5, line 55-59; see col. 9, line 33-34; plurality of data rates) including at least a standard data rate and a higher data rate (see col. 1, line 25-37; see col. 6, line 13-25; see col. 9, line 33-35; low or less than full (i.e. half or quarter) data rate and full data rate).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide data rates including at least a standard data rate and a higher data rate, as taught by Weaver in the combined system of Berken and Richter, so that it would provide avoid the disadvantage of tandem vocoding; see Weaver col. 1, line 60-67.

**Regarding Claim 54**, Berken discloses conversion circuitry for converting analog voice signals to digital voice data (see FIG. 1C, phone interface 209 converts sound/voice input from telephone 127 into digital voice packets for radio transmission; see page 6, line 16-20) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1C, phone interface 209 converts digitized voice packets received from radio interface back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5).

5. Claims 23,24,30,31,37,38,48,49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Richter, and further in view of Perkins (US005159592A).

**Regarding Claims 23, 24,30,31,37,38,48,49**, neither Berken nor Richter explicitly discloses an Internet Protocol (IP), wherein IP protocol is TCP/IP. However, Perkins discloses wherein the wireless packet network uses an Internet Protocol (IP), wherein IP protocol is TCP/IP (see col. 4, line 10-20; see col. 7, line 35-56; col. 8, line 30-45; mobile unit 10 and access gateway utilizing TCP/IP).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide TCP/IP, as taught by Perkins, in the system of Berken, so that it would provide wireless migration users to a network operating in accordance with the TCP/IP protocol; see Perkins col. 2, line 55-60; see col. 3, line 15-30.

6. Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Harrison, and further in view of Perkins (US005159592A).

**Regarding Claims 44 and 45**, neither Berken nor Harrison explicitly disclose an Internet Protocol (IP), wherein IP protocol is TCP/IP. However, Perkins discloses wherein the wireless packet network uses an Internet Protocol (IP), wherein IP protocol is TCP/IP (see col. 4, line 10-20; see col. 7, line 35-56; col. 8, line 30-45; mobile unit 10 and access gateway utilizing TCP/IP).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide TCP/IP, as taught by Perkins, in the combined system of Berken and Harrison, so that it would provide wireless migration users to a network operating in accordance with the TCP/IP protocol; see Perkins col. 2, line 55-60; see col. 3, line 15-30.

7. Claims 52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Richter and Weaver, and further in view of Perkins (US005159592A).

**Regarding Claims 52 and 53**, neither Berken, Richter nor Weaver explicitly discloses an Internet Protocol (IP), wherein IP protocol is TCP/IP. However, Perkins discloses wherein the wireless packet network uses an Internet Protocol (IP), wherein IP protocol is TCP/IP (see col. 4, line 10-20; see col. 7, line 35-56; col. 8, line 30-45; mobile unit 10 and access gateway utilizing TCP/IP).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide TCP/IP, as taught by Perkins, in the combined system of Berken, Richter and Weaver, so that it would provide wireless migration users to a network operating in accordance with the TCP/IP protocol; see Perkins col. 2, line 55-60; see col. 3, line 15-30.

8. Claims 55 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken and Richter, and further in view of Cripps (US005838730A).

**Regarding Claims 55 and 56**, Berken disclose a frequency hopping spread spectrum technique (see page 11, line 20-31; frequency hopping system of spread spectrum coding).

Berken does not explicitly disclose a frequency of approximately 2.4 gigahertz.

However, using 2.4 GHz frequency hopping is well known in the art as defined by FCC. In particular, Cripps discloses wherein the wireless packet network communicates at a frequency of approximately 2.4 gigahertz (abstract; see col. 2, line 13-20; see col. 36, line 32-45; 2.4 GHz).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide 2.4 GHz, as taught by Cripps, in the combined system of Berken and Richter, so that it would provide a transmitter/receiver in accordance with FCC rules for 2.4 GHz ISM which is low cost and low power; see Cripps col. 2, line 15-32.

9. Claims 60, 61, 62, and 68-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Hutton (US006108704A), and further in view of Reimer (U.S. 4,704,696).

**Regarding Claim 60**, Berken discloses one or more circuits for use in a handheld communication device supporting the exchange of voice over a communication network (see FIG. 1A, C, circuits/modules/components of wireless user device for voice communication in a network; see page 4, line 6-9), the one or more circuits comprising:

at least one interface to circuitry for transmitting and receiving over a radio frequency channel (see FIG. 1A, C, Radio interface 211 circuitry/module for both transmitting and receiving over an RF channel 107; see page 6, line 14-20; page 7, line 25-32), packets comprising packetized digital voice data packetized according to a packet protocol (see FIG. 1C, packets comprises packetized/converted voice data in accordance with packet protocol/rule for transmission; see page 6, line 16-20);

at least one processor (see FIG. 1C, a combined system of processor 215, switch 213, phone 209) operably coupled to the at least one interface (see FIG. 1C, couples to radio interface 211), the at least one processor operating to, at least,

convert analog voice signals at a first user location (see FIG. 1A, first User device; see FIG. 5, first user module UM1; see page 9, line 28-33) to first digital voice data (see FIG. 1C, phone interface 209 converts sound/voice input from telephone 127 into digital voice data for packetizing; see page 6, line 16-20);

packetize the first digital voice data according to the packet protocol to produce first digital voice data packets (see FIG. 1C, phone interface 209 converts/packetize digital voice data into voice packets; see page 6, line 16-20), wherein the first digital voice data packets comprise information (see FIG. 3, control time slot of frame; and/or FIG. 4, packet header of the voice time slot) used for routing the first digital voice data packets through the communication network (see page 9, line 1-10; see page 10, line 17-30; control time slot of the transmit/receive frame comprises information for routing/forwarding through PSTN, Ethernet LAN, or Token Ring LAN; and/or a packet header of the voice time slot comprises information for routing/forwarding through PSTN, Ethernet LAN, or Token Ring LAN);

wirelessly transmit, in accordance with a wireless communication protocol, the first digital voice data packets (see FIG. 1A,C, see page 6, line 14-20; the user module 103 transmits voice packets over radio channel 107 in accordance with radio protocol/practice/procedure/rule);

wirelessly receive, in accordance with the wireless communication protocol, second digital voice data packets (see FIG. 1A,C, see page 6, line 14-20; the user module 103 received voice packets from RF channel 107 in accordance with a radio protocol/practice/procedure/rule);

depacketize the second digital voice data packets to produce second digital voice data (see FIG. 1C, phone interface 209 depacketizes/converts digitized voice packets back into digitized voice data for the telephone 127; see page 5, line 28 to page 6, line 5); and

convert the second digital voice data to analog voice signals at the location of the first user (see FIG. 1C, phone interface 209 converts digitized voice data back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5).

Berken does not explicitly disclose "destination and to a second user".

However, a user device sending voice packet to another user over the network is well known in the art. In particular, Hutton teaches the first digital voice data packets (see col. 3, line 55-61; see col. 4, line 19-25, 65 to col. 5, line 20; see col. 8, line 20-26; IP packet with compressed voice/audio data) comprise destination information (see FIG. 5-6, destination/callee IP address or phone number of second processing unit 22) used for routing the first digital voice data packets (see FIG. 3-4, destination IP address is used for routing the compressed audio data IP packets) through the communication network (see FIG. 3-4, routing through Internet 24) to a second user (see FIG. 3-4, to the remote user/callee user device at second processing unit 22); see col. 5, line 1-65; see col. 7, line 10-35; see col. 8, line 15-45; see col. 10, line 25-60).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide destination and a second user, as taught by Hutton in the system of Berken, so that it would provide exchanging realtime voice/video IP packet with IP address between two end units via Internet; see Hutton col. 1, line 50-65; also by utilization destination information, it enable the caller to route the voice packets to the callee.

Neither Berken nor Hutton explicitly discloses the first digital voice data is "not transmission when representative of audio signals below a predetermined threshold level".

However, Reimer discloses the first digital voice data is not packetized for transmission when representative of audio signals below a predetermined threshold level (see FIG. 5, Steps



52,54,55,58; speech digital data is not framed/packetized for transmission by waiting when speech signal is lower than predetermined threshold; see 6, line 10-32).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "not transmission when representative of audio signals below a predetermined threshold level" as taught by Reimer, in the combined system of Berken and Hutton, so that it would provide capability to detect non-zero zero-crossing frames as suggested by Reimer; see Reimer col. 6, line 10-30.

**Regarding Claims 61 and 62**, Hutton discloses wherein the wireless packet network uses an Internet Protocol (IP), wherein IP protocol is TCP/IP (see col. 3, line 55-60; col. 2, line 60-67; see col. 5, line 1-10; utilizing TCP/IP in wireless network).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide TCP/IP, as taught by Hutton in the system of Berken, so that it would provide exchanging realtime voice/video IP packet with IP address between two end units via Internet; see Hutton col. 1, line 50-65.

**Regarding Claim 68**, Berken disclose a frequency hopping spread spectrum technique (see page 11, line 20-31; frequency hoping system of spread spectrum coding).

**Regarding Claim 69**, Berken disclose a direct sequence spread spectrum technique (see page 11, line 20-31; direct sequence spread spectrum coding).

**Regarding Claim 70**, Berken disclose wherein the at least one processor (see FIG. 1A, C; a combined system of processor 215, switch 213, phone 209) is further operable to cause routing of digital voice data packets over a wired network (see page 9, line 1-10; see page 10,

line 17-30; the combined system of 215, 213 and 209 routes/forwards voice packets over PSTN, Ethernet LAN, or Token Ring LAN).

**Regarding Claim 71**, Berken disclose wherein the routing of a call is selected by the first user (see FIG. 1A,C; a user enters/selects (from user input terminals 169,165 or 127) destination address/number (i.e. the routing of a call) in order to establish the call/connection; see page 9, line 1-10; see page 10, line 17-30).

**Regarding Claim 72**, Berken disclose the wired network comprises a packet network (see FIG. 1A, see page 9, line 1-10; see page 10, line 17-30; Ethernet LAN, or Token Ring LAN).

**Regarding Claims 73**, Berken discloses the wired network is a conventional switched telephone network (see FIG. 1A, PSTN 151; see page 9, line 1-10; see page 10, line 17-30).

10. Claims 63-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Hutton, and further in view of Lewen (US005341374A).

**Regarding Claim 63**, the combine system of Berken and Hutton discloses wherein the at least one processor received digital voice data and conversion of digital voice data as set forth above in claim 60.

Neither Berken nor Hutton explicitly discloses queues received data and delays conversion of queued data for an adjustable period of time.

However, Lewen teaches queuing (see FIG. 4, queuing/storing/collecting common memory 80) received digital voice data (see FIG. 2, collect received samples 120; see col. 14, line 44-49) and delays conversion of queued digital voice data for an adjustable period of time

(see FIG. 2, delay time for storing/collecting voice samples in the memory before packetizing is adjusted between  $T_w$  (walktime) up to  $T_{bfr}$  (buffer storage time)); see col. 15, line 5-9, 15-30.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to queue received data and delays conversion of queued data for an adjustable period of time, as taught by Lewen in the combined system of Berken and Hutton, so that it would provision a communication system which effectively provides integrated voice, data and video communication and also provide real time reception of voice communication; see Lewen col. 2, line 50-62.

**Regarding Claim 64**, Lewen further discloses adjusts the period of time based upon a network propagation delay (see col. 13, line 56-66; see col. 14, line 22-39; see col. 15, line 5-9, 15-30; adjusting delay time according  $T_w$  (propagation delay)). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adjust the period of time based upon a network propagation delay, as taught by Lewen in the combined system of Berken and Hutton, for the same motivation as set forth above in claim 63.

**Regarding Claim 65**, Lewen further discloses adjustable period of time using a packet sent to the communication device in response to a packet sent by the communication device (see col. 13, line 56-66; see col. 14, line 22-39; see col. 15, line 5-9, 15-30; adjusting delay time according  $T_w$  (propagation delay), which is a time required for a signal bit of a frame/packet to travel from transmitting node to receive node). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide adjustable period of time using a packet sent to the communication device in response to a packet sent by the

communication device, as taught by Lewen in the combined system of Berken and Hutton, for the same motivation as set forth above in claim 63.

11. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Hutton and Lewen, and further in view of McKee (US005477531A).

**Regarding Claim 80**, neither Berken, Hutton nor Lewen explicitly disclose a test packet. However, McKee discloses determining propagation delay or queuing delay by utilizing in response to test packet sent by the communication device (see FIG. 2, test packet; see col. 1, line 60 to col. 2, line 60).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a test packet, as taught by McKee, in the combined system of Berken, Hutton and Lewen, so that it would provide to determine/test propagation delay or queuing delay; see McKee abstract col. 2, line 20-32.

12. Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Hutton, and further in view of Cripps (US005838730A).

**Regarding Claim 67**, Berken disclose a frequency hopping spread spectrum technique (see page 11, line 20-31; frequency hoping system of spread spectrum coding).

Berken does not explicitly disclose a frequency of approximately 2.4 gigahertz. However, using 2.4 GHz frequency hopping is well known in the art as defined by FCC. In particular, Cripps discloses wherein the wireless packet network communicates at a frequency of approximately 2.4 gigahertz (abstract; see col. 2, line 13-20; see col. 36, line 32-45; 2.4 GHz).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide 2.4 GHz, as taught by Cripps, in the combined system of Berken and Hutton, so that it would provide a transmitter/receiver in accordance with FCC rules for 2.4 GHz ISM which is low cost and low power; see Cripps col. 2, line 15-32.

**Original Rejection**

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 22,27-29,32,35,36,39,42,47,50,51 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver (US005956673A) in view of Richter (US006104706A).

**Regarding Claims 22,28,29,36 and 47,** Weaver discloses a system (see FIG. 2, Remote unit 10) for processing voice for communication (see FIG. 1, remote vocoder 15) over a network (see FIG. 2, Wireless network 20) comprising:

conversion circuitry (see FIG. 1, Encoder 180 and Decoder 90) for converting analog voice signals to digital voice data (see FIG. 1, Encoder 180 performs A/D conversion) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1, Decoder 90 performs D/A conversion; see col. 3, line 25-40; col. 4, line 40-59);

a processing circuit (see FIG. 1, Encoder 180 and Decoder 90) for managing the packetization of digital voice data to provide digital voice data packets (see FIG. 1, Encoder 180

performs packetizing) and for managing the depacketization of digital voice data (see FIG. 1, Decoder 90 decodes packets into digital voice), the processing circuit packetizing the digital voice data according to a packet protocol (see col. 3, line 20-40; col. 4, line 20-39, 40-67; see col. 5, line 34-67; packetizing according to a packet protocol); and

a transceiver circuit (see FIG. 2, Transceiver in a remote unit 10) for wireless transmission and wireless reception according to a wireless communication protocol of the digital voice data packets (see col. 4, line 40-67; transmitting over wireless link according to wireless protocol), wherein the digital voice data packets comprises information used for routing the digital voice data packets (see FIG. 3,4,9; voice packets comprise control/signaling information for routing voice data packets; see col. 3, line 20-40; see col. 5, line 34-46; see col. 6, line 52-65).

Weaver does not explicitly disclose "destination information".

However, it is well known in the art when forming and routing packets/frames over the network to remote end/destination, one must use destination address/number/information to route. In particular, Richter teaches wherein the digital voice packets comprise destination information used for routing (see FIG. 6, destination address 76, max destination count 74, active destination count 72, and destination count that used for routing; see col. 6, line 60 to col. 7, line 20) the digital voice packets through the communication network (see FIG. 5, for routing voice packets over the network between two callers; see col. 5, line 36-66; col. 6, line 44-56).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide destination, as taught by Richter and well established teaching in art in the system of Weaver, so that it would provide capability to the caller and callee to hear

each other; see Richter col. 7, line 10-19, and it would also identify and locate the recipient of the voice data packet.

**Regarding Claim 51**, Weaver discloses a system (see FIG. 2, Remote unit 10) for processing voice for communication (see FIG. 1, remote vocoder 15) over a network (see FIG. 2, Wireless network 20) comprising:

a processing circuit (see FIG. 1, Encoder 180 and Decoder 90) for managing the packetization of digital voice data to provide digital voice data packets (see FIG. 1, Encoder 180 performs packetizing) and for managing the depacketization of digital voice data (see FIG. 1, Decoder 90 decodes packets into digital voice), wherein the digital voice data packets comprises information used for routing the digital voice data packets (see FIG. 3,4,9; voice packets comprise control/signaling information; see col. 3, line 20-40; see col. 5, line 34-46; see col. 6, line 52-65), the processing circuit packetizing the digital voice data according to a packet protocol (see col. 3, line 20-40; col. 4, line 20-39, 40-67; see col. 5, line 34-67; packetizing according to a packet protocol); and

a radio for wireless transmission and reception of digital voice data packets (see FIG. 2, Radio Transceiver in a remote unit 10; see col. 4, line 40-67) and

a processor (see FIG. 1, Encoder 180) for controlling the operation of the radio according to a communication protocol that accommodates a plurality of data rates (see col. 1, line 25-37; see col. 5, line 55-59; see col. 9, line 33-34; plurality of data rates) including at least a standard data rate and a higher data rate (see col. 1, line 25-37; see col. 6, line 13-25; see col. 9, line 33-35; low or less than full (i.e. half or quarter) data rate and full data rate).

Weaver does not explicitly disclose destination information.

However, it is well known in the art when forming and routing packets/frames over the network to remote end/destination, one must use destination address/number/information to route. In particular, Richter teaches wherein the digital voice packets comprise destination information used for routing (see FIG. 6, destination address 76, max destination count 74, active destination count 72, and destination count that used for routing; see col. 6, line 60 to col. 7, line 20) the digital voice packets through the communication network (see FIG. 5, for routing voice packets over the network between two callers; see col. 5, line 36-66; col. 6, line 44-56).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide destination, as taught by Richter and well established teaching in art in the system of Weaver, so that it would provide capability to the caller and callee to hear each other; see Richter col. 7, line 10-19, and it would also identify and locate the recipient of the voice data packet.

**Regarding Claims 27,35,42,** Weaver discloses wireless transmission and reception of digital voice data packets/transceiver utilizes a communication protocol that accommodates a plurality of data rates (see FIG. 1, Encoder 180; see col. 1, line 25-37; see col. 5, line 55-59; see col. 9, line 33-34; plurality of data rates) including at least a standard data rate and a higher data rate (see col. 1, line 25-37; see col. 6, line 13-25; see col. 9, line 33-35; low or less than full (i.e. half or quarter) data rate and full data rate).

**Regarding Claims 32,39,50,54,** Weaver discloses conversion circuitry (see FIG. 1, Encoder 180 and Decoder 90) for converting analog voice signals to digital voice data (see FIG. 1, Encoder 180 performs A/D conversion) and for converting digital voice data to analog voice



signals for the reproduction of voice (see FIG. 1, Decoder 90 performs D/A conversion; see col. 3, line 25-40; col. 4, line 40-59).

15. Claims 23,24,30,31,37,38,48,49,52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver in view of Richter, as applied to claims 22,29,36,47,51 above, and further in view of Perkins (US005159592A).

**Regarding Claims 23, 24, 30,31,37,38,48,49,52, and 53**, neither Weaver nor Richter explicitly discloses an Internet Protocol (IP), wherein IP protocol is TCP/IP. However, Perkins discloses wherein the wireless packet network uses an Internet Protocol (IP), wherein IP protocol is TCP/IP (see col. 4, line 10-20; see col. 7, line 35-56; col. 8, line 30-45; mobile unit 10 and access gateway utilizing TCP/IP).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide TCP/IP, as taught by Perkins, in the combined system of Weaver and Richter, so that it would provide wireless migration users to a network operating in accordance with the TCP/IP protocol; see Perkins col. 2, line 55-60; see col. 3, line 15-30.

16. Claims 43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver (US005956673A) in view of Harrison (US 5,796,727).

**Regarding Claim 43**, Weaver discloses a system (see FIG. 2, Remote unit 10) for processing voice for communication (see FIG. 1, remote vocoder 15) over a network (see FIG. 2, Wireless network 20) comprising:

a processing circuit (see FIG. 1, Encoder 180 and Decoder 90) for managing the packetization of digital voice data to provide digital voice data packets (see FIG. 1, Encoder 180 performs packetizing) and for managing the depacketization of digital voice data (see FIG. 1, Decoder 90 decodes packets into digital voice), the processing circuit packetizing the digital voice data according to a packet protocol (see col. 3, line 20-40; col. 4, line 20-39, 40-67; see col. 5, line 34-67; packetizing according to a packet protocol); wherein the digital voice data packets comprises information used for routing the digital voice data packets (see FIG. 3,4,9; voice packets comprise control/signaling information; see col. 3, line 20-40; see col. 5, line 34-46; see col. 6, line 52-65);

a transceiver circuit (see FIG. 2, Transceiver in a remote unit 10) for wireless transmission and wireless reception according to a wireless communication protocol of the digital voice data packets (see col. 4, line 40-67; transmitting over wireless link according to wireless protocol).

Weaver does not explicitly disclose "destination information and a media access controller for controlling operation".

However, Harrison teaches wherein the digital voice packets (see col. 4, line 45-49; 65 to col. 5, line 7; packets of voice data) comprise destination information used for routing the outgoing digital voice packets (see FIG. 5; MS adding destination address into packet for routing through network (see FIG. 1); see col. 6, line 5-12; see col. 7, line 35 to col. 8, line 15; see col.12, line 39 to col. 13, line 11);

a media access controller (see col. 5, line 25-31; MAC) for controlling the operation of the transceiver to transmit and receive information according to a wireless communication

protocol (see col. 12, line 39-61; MAC controls/process transmit and receive information according to IEEE wireless protocol). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide destination information and MAC, as taught by Harrison in the system of Weaver, so that it would ensure to establish and route the packets of voice data to destination end user, provide various classes of data communication services as well as voices services, and provide registration and channel/bandwidth allocation; see Harrison col. 3, line 22-26; see col. 4, line 50-55; see col. 7, line 35-55.

**Regarding Claim 46**, Weaver discloses conversion circuitry (see FIG. 1, Encoder 180 and Decoder 90) for converting analog voice signals to digital voice data (see FIG. 1, Encoder 180 performs A/D conversion) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1, Decoder 90 performs D/A conversion; see col. 3, line 25-40; col. 4, line 40-59).

17. Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver in view of Harrison, as applied to claim 43 above, and further in view of Perkins (US005159592A).

**Regarding Claims 44 and 45**, neither Weaver nor Harrison explicitly discloses an Internet Protocol (IP), wherein IP protocol is TCP/IP. However, Perkins discloses wherein the wireless packet network uses an Internet Protocol (IP), wherein IP protocol is TCP/IP (see col. 4, line 10-20; see col. 7, line 35-56; col. 8, line 30-45; mobile unit 10 and access gateway utilizing TCP/IP).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide TCP/IP, as taught by Perkins, in the combined system of Weaver and Harrison, so that it would provide wireless migration users to a network operating in accordance with the TCP/IP protocol; see Perkins col. 2, line 55-60; see col. 3, line 15-30.

18. Claims 25,33,40, and 55-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver in view of Richter, as applied to claims 22,29,36,47 above, and further in view of Cripps (US005838730A).

**Regarding Claims 25, 33,40,57,58 and 59**, neither Weaver nor Richter explicitly discloses a frequency hopping spread spectrum protocol. However, using frequency hopping spread spectrum protocol is well known in the art. In particular, However, Cripps discloses wherein the wireless packet network communicates frequency hopping spectrum protocol (abstract; see col. 2, line 13-20; see col. 36, line 32-45; 2.4 GHz).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide frequency hopping spread spectrum protocol with 2.4 GHz, as taught by Cripps, in the combined system of Weaver and Richter, so that it would provide a transmitter/receiver in accordance with FCC rules to support frequency hopping spread spectrum 2.4 GHz ISM which is low cost and low power; see Cripps col. 2, line 15-32.

**Regarding Claims 55 and 56**, neither Weaver nor Richter explicitly discloses a radio comprises a 2.4 gigahertz, wherein the radio operates in accordance with a frequency hopping spread spectrum protocol. However, using 2.4 GHz frequency hopping is well known in the art as defined by FCC. In particular, Cripps discloses disclose a radio comprises a 2.4 gigahertz,

wherein the radio operates in accordance with a frequency hopping spread spectrum protocol (abstract; see col. 2, line 13-20; see col. 36, line 32-45; 2.4 GHz).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide 2.4 GHz frequency hopping protocol, as taught by Cripps, in the combined system of Weaver and Richter, so that it would provide a transmitter/receiver in accordance with FCC rules for 2.4 GHz ISM which is low cost and low power; see Cripps col. 2, line 15-32.

19. Claims 26,34, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver in view of Richter, as applied to claims 22,32,52 above, and further in view of Honing (US005481533A).

**Regarding Claims 26, 34, and 41**, neither Weaver nor Richter explicitly discloses a direct sequence spread spectrum technique. However, using direct sequence spread spectrum technique is well known in the art. In particular, Honing discloses wherein the wireless packet network communicates using a direct sequence spread spectrum technique (abstract; see col. 2, line 34-40).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide direct sequence spread spectrum technique, as taught by Honing, in the combined system of Weaver and Richter, so that it would suppress interference; see Honing col. 2, line 38, line 38-40.

20. Claims 22, 28, 29, 36 and 47 rejected under 35 U.S.C. 103(a) as being unpatentable over Berken (WO 91/08629) in view of Shachar (U.S. 5,764,736, disclosed by IDS filed on 8/24/2007 after mailing of non-final office action).

**Regarding Claims 22, 28, 29, 36 and 47,** Berken discloses a system for processing voice for communication over a network (see FIG. 1A, wireless telecommunication system for voice and data communication; see page 4, line 6-9) comprising:

conversion circuitry (see FIG. 1C, phone interface 209) for converting analog voice signals to digital voice data (see FIG. 1C, phone interface 209 converts sound/voice input from telephone 127 into digital voice packets; see page 6, line 16-20) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1C, phone interface 209 converts received digitized voice packets back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5);

a processing circuit (see FIG. 1C, a combined system of processor 215, switch 213, phone 209) for managing the packetization of digital voice data to provide digital voice data packets (see FIG. 1C, a combined system 215, 213, 209 controls/manages converting of voice data to digital voice packets; see page 6, line 5-20) and for managing the depacketization of digital voice data (see FIG. 1C, a combined system 215, 213, 209 controls/manages converting of received digitized voice packets back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5), the processing circuit packetizing the digital voice data according to a packet protocol (see FIG. 1C, a combined system 215, 213, 209 converting voice data in accordance with packet protocol/rule for transmission; see page 6, line 16-20); and

a transceiver circuit for wireless transmission and wireless reception (see FIG. 1A, C, Radio interface 211 circuitry/module which perform both transmitter and receiver functionalities) according to a wireless communication protocol of the digital voice data packets (FIG. 1C, see page 6, line 14-20; radio interface 211 of a user module 103 communicates by utilizing packet protocol/practice/procedure/rules), wherein the digital voice data packets comprises information (see FIG. 3, control time slot of frame; and/or FIG. 4, packet header of the voice time slot) used for routing the digital voice data packets (see page 9, line 1-10; see page 10, line 17-30; control time slot of the transmit/receive frame comprises control information for routing/forwarding through PSTN, Ethernet LAN, or Token Ring LAN; and/or a packet header of the voice time slot comprises control information routing/forwarding through PSTN, Ethernet LAN, or Token Ring LAN).

Berken does not explicitly disclose "destination".

However, voice packet comprising destination information for routing is so well known in the art so that it would identify and locate the recipient of the voice data packet. In particular,

However, voice packet comprising destination information for routing is so well known in the art so that it would identify and locate the recipient of the voice data packet. In particular, Shachar teaches wherein digital voice packets (see col. 8, line 32-39; voice packet) comprise destination information used for routing the digital voice packets through the communication network (see col. 12, line 1-20, 50-57; adding a service tag to the voice packet, the service tag includes the phone number to be call (i.e. destination phone information/number) for routing/transmitting/sending to the network).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "destination", as taught by Shachar and well established teaching in art in the system of Berken, so that it would provide simultaneous establishing of voice communication; see Shachar col. 5, line 15-30, col. 6, line 42-55.

***Response to Arguments***

21. Applicant's arguments filed 1-9-2008 have been fully considered but they are not persuasive.

**Regarding claims 22-73, the applicant argued that, "...Richter is not, in and of itself, valid prior art...the applicants have not been provided with "...such information and references as may be useful in judging of the propriety of continuing the prosecution of this application..." as required under 35 U.S.C 132..." in page 12-15.**

**In response to applicant's argument, the examiner respectfully disagrees with the argument above.**

**(1) 35 U.S.C 132 (a) does not disclose or suggest the examiner to provide a parent application of a CONTINUED child case, and "continuing the prosecution of his application" is not "continuation of prior art application".**

**In particular, 35 U.S.C 132 (a) recites as follows:**

**Whenever, on examination, any claim for a patent is rejected, or any objection or requirement made, the Director shall notify the applicant thereof, stating the reasons for such rejection, or objection or requirement, together with such information and references as may be useful in judging of the propriety of continuing the prosecution of his application; and if after receiving such notice, the applicant persists in his claim for a patent, with or without amendment, the application shall be reexamined. No amendment shall introduce new matter into the disclosure of the invention. (Emphasis added)**



Thus, 35 U.S.C 132 (a) clearly states that the director shall notify the applicant references so that it may be useful for "the applicant" in judging of the propriety of **continuing** the prosecution of his (i.e. the applicant) application. Moreover, prior art is not being examined, but the applicant instant application is, and consequently there is no need to judge of the propriety of continuing the prosecution of prior art application. Thus, it is clear that 35 U.S.C 132 (a) does not reciting anything about continuation of prior art application.

(2) The effective filing data for this instant application is October 5, 1995. Richter patent U.S. Patent to Richter (US006104706A), hereinafter refers Richter Patent, is based on DOMESTIC CONTINUATION of non-provisional application 08/073,956, filed on June 9, 1993. Thus, it is clear that Richter patent is a valid prior art. Since Richter patent is based on DOMESTIC CONTINUATION of non-provisional application 08/073,956, filed on June 9, 1993, the entire disclosure of Richter patent is identical to non-provisional application 08/073,956, filed on June 9, 1993.

**MPEP section 201.07** recites as follows:

A continuation is a second application for the same invention claimed in a prior nonprovisional application and filed before the original prior application becomes abandoned or patented. The continuation application may be filed under 37 CFR 1.53(b) (or 1.53(d) if the application is a design application). The applicant in the continuation application must include at least one inventor named in the prior nonprovisional application. **The disclosure presented in the continuation must be the same as that of the original application; i.e., the continuation should not include anything which would constitute new matter if inserted in the original application.** The continuation application must claim the benefit of the prior nonprovisional application under 35 U.S.C. 120 or 365(c). (Emphasis added)

**CFR 1.53 (d)(ii)** recites as follows:

(d) (2) The filing date of a continued prosecution application is the date on which a request on a separate paper for an application under this paragraph is filed. An application filed under this paragraph:

(i) Must identify the prior application;

(ii) **Discloses and claims only subject matter disclosed in the prior application;**  
(emphasis added)

**35 U.S.C. 120** recites as follows:

**An application for patent for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in an application previously filed in the United States**, or as provided by section 363 of this title, which is filed by an inventor or inventors named in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application, if filed before the patenting or abandonment of or termination of proceedings on the first application or on an application similarly entitled to the benefit of the filing date of the first application and if it contains or is amended to contain a specific reference to the earlier filed application. (emphasis added)

Thus, in view of the above it is clear that Richter patent is a valid prior art since Richter patent discloses the same disclosure as that of the original application (08/073,956).

**Regarding claims 22-59, the applicant argued that,** "...the proposed combination fails to teach, suggest or discloses..." "wherein the digital voice packets comprise destination information for routing the digital voice data packets" as recited in claims 22,28, "wherein the digital voice packets comprise destination information for routing the digital voice data packets through the communication network" as recited in claim 29..." "wherein the digital voice data is packetized according to a packet protocol comprising destination information used for routing the digital voice data packetized according to the packet protocol through the communication network" as recited in claim 36; "wherein the digital voice packets comprise destination information for routing the digital voice data packets through the network" as recited in claim 47; "wherein the digital voice packets comprise destination information for routing the digital voice data packets through the network" as recited in claim 51 ... the control time slots of

Berken are separate from the voice time slots, and the voice packet is contained within a voice time slot within a frame, and **not within** a control time slot...Any routing information alleged to be contained within packets in the control time slot is not contained within a voice packet...the “frame” of Berken is not analogous to “a packet”...Nothing in Berken teaches that “the control time slots” comprise...information used for routing the digital voice data packets through the communication network...the office failed to establish a prima facie case of obviousness...the alleged motivation for making the combination are not valid motivation...failed to identify “...some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the references or to combine reference teachings...” in page 15-18.

**In response to applicant’s argument, the examiner respectfully disagrees** with the argument above since the combined system of Berken and Richter discloses the claimed invention.

Berken discloses wherein the digital voice data packets comprises information (see FIG. 3, control time slot of frame; and/or FIG. 4, packet header of the voice time slot) used for routing the digital voice data packets (see page 9, line 1-10; see page 10, line 17-30; control time slot of the transmit/receive frame comprises control information for routing/forwarding through PSTN, Ethernet LAN, or Token Ring LAN; and/or a packet header of the voice time slot comprises control information routing/forwarding through PSTN, Ethernet LAN, or Token Ring LAN).

Richter teaches wherein the digital voice data packets comprise destination information used for routing (see FIG. 6, destination address 76, max destination count 74, active destination count 72, and destination count that used for routing; see col. 6, line 60 to col. 7, line 20) the

digital voice packets through the communication network (see FIG. 5, for routing voice packets over the network between two callers; see col. 5, line 36-66; col. 6, line 44-56).

Moreover, voice packet comprising destination information for routing is so well known in the art so that it would identify and locate the recipient of the voice data packet. It is so well known in the art that a radio control/header contains destination information for routing through the communication network” as one can evident from the following prior arts:

**Hershey (US005481539A)**- FIG. 4, Destination ID and data field in the radio frame and data; see entire document.

**Harrison (US 5,068,916)**- FIG. 3, Destination address 48b and data field 48e in the radio frame; see entire document.

**Berry (US 5,758,256)**- voice packet comprising destination information (i.e. message type, sequence number) and data field; see col. 5, line 64 to col. 6, line 9.

The following prior arts recite the well known and establish concept of a **packet/frame header comprises destination information for routing through the communication network.**

**Fischer (US005502726A)**- routing a packet header with destination address from one node to the other over a network; entire document

**Cerna (US005444707A)**- embedding destination information within a header portion of a voice information packet; see claim 4 and 5.

**Agrawal (US 4,493,021)**- FIG. 2, destination address (DA) in the packet header and data block; see entire document.

**Kline (US006157653A)**- FIG. 3, a voice packet with header 302 with connection identifier and sequence number 306 used routing/switching over the network and a payload 304 with voice data- see entire document.

Applicant broadly claimed invention of “digital voice packets ...**comprises** destination information used for routing” is disclosed Berken in two alternate scenarios:

In first scenario, a digital voice frame that comprises a digital voice time slot and a control time slot (see FIG. 2), and the control time slot comprise routing/transmitting/sending information such as address, control information and signaling information of the digital voice data so that the digital voice packet is distinguished and recover at the receiving side, which is the fundamental concept of the wireless communication. Otherwise, it is impossible to recover the wireless” digital voice data, or

In second scenario, a voice time slot/packet that comprises a digital voice packet data/information and packet preamble/packet header (FIG. 4), and the packet header/preamble comprise routing/transmitting/sending information such as address, control information and signaling information of the digital voice packet data/information so that the digital voice packet is distinguished and recover at the receiving side.

**In response to argument**, on control time slot of Berken,

1) examiner is not equating control packet to voice packet as argued by the application. Examiner is equating a frame that contains a control time slot and voice packet time slot (see Berken FIG. 2-3) to applicant’s voice packet that comprises control information for routing. Berken FIG. 2, clearly shows that multiple time slots 1-M within a frame, which also confirms

examiner's assertion stated above. Thus, applicant argument of "the voice time slot is not within a control time slot" is irrelevant and simply an error.

2) the claim recites, "digital voice packet...**comprises** destination information used for routing". Note that the phrase "comprise" is an open phrase and it does not require "destination information used for routing" to be "**within**", "**inside**", or "**consisting**". In other word, the phrase "comprises" is not the same as "**within**", "**inside**", or "**consisting**". Thus, the applicant argument on Berken not disclosing "destination information used for routing" **within/inside/consisting** is also irrelevant since the claimed invention does not recite the argued limitation. Even if this claimed limitation is claimed, Berken still discloses the claimed invention as set forth above.

**In response to argument**, on a header of the voice of the voice slot of Berken, a voice packet time slot contains packet header (see Berken FIG. 4) which also contains control information for routing/switching voice packets to applicant's voice packet that comprises control information for routing.

Thus, in view of the above, it is clear that Berken clearly discloses the claimed invention.

**In response to applicant's arguments** against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, the rejection is based on the combined system of Berken and Richter, not Berken or Richter alone.

**In response to applicant's argument** that it is not obvious, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure

of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, examiner is using the teaching of Richter to provide Berken, not moodily incorporation Richter into Berken.

**In response to argument on motivation**, applicant arguments are contradictory to each other. Applicant argues that there is “no motivation or suggestion” and then admits there is a motivation.

As one skilled in the ordinary art would clearly see that voice packet comprising destination information for routing is so well known in the art so that it would identify and locate the recipient of the voice data packet. This is a well know concept of communication, as one can clearly evident in view of Richter. Examiner is clearly recited the motivation according to the knowledge generally available to one of ordinary skill in the art above, and in view of Richter below.

**In response to applicant's argument** that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide destination, as taught by Berken and well established teaching

in art in the system of Berken, so that it would provide capability to the caller and callee to hear each other; see Richter col. 7, line 10-19, and it would also identify and locate the recipient of the voice data packet.

**In response to argument** on “packet” and “frame” terms, both “packet” and “frame” has identical functionality of packaging or framing digitized voice data into the form (i.e. packet or frame) for transmission. Since they both have identical functionalities, they both are the same. Moreover, the combined system of Berken and Richter still discloses the “digitized voice data packet” as set forth above.

Thus, in view of the above, examiner has clearly and precisely established a case of *prima facie* obviousness.

**Regarding claim 43, the applicant argued that,** “...applicant assumes that the office action meant to state that “...Berken does not explicitly disclose destination...” ...Berken does not contain a “FIG. 9” ...applicant request that the office provide corrected citations...” in page 16 and 21.

**In response to applicant's argument,** applicant assuming is correct, and the examiner has corrected minor typographical errors.

**Regarding claim 60-73, the applicant argued that,** “...the proposed combination of Berken and Hutton fails to disclose “the first digital voice data in not packetierize...threshold level” in pages 26-28.

**In response to Applicant's arguments** with respect to claims 60-72 have been considered but are moot in view of the new ground(s) of rejection since the argued limitation is newly added to the claim as amendment.



**Regarding claims 22-73, the applicant argued that, "...with respect to rejections of claims 22-42 and 47-59 over the listed combinations that include Richter, applicant respectfully submit that Richter is not a valid prior art reference...applicant hereby incorporate herein applicant's responses of record in the application..."** in pages 28-29.

**In response to applicant's argument, the examiner respectfully disagrees with the argument above.**

Since the combined system of Weaver and Richter discloses the claimed invention as set forth in previous office action. Moreover, with regards to Richter, please responses above. Examiner is hereby incorporated herein the previous responses to the applicant previous arguments.

### ***Conclusion***


22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Ian N. Moore  
Examiner  
Art Unit 2616

INM  
2-1-08

  
DORIS H. TO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600